TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 6, 2005

TO: Internal File

THRU: Peter H. Hess, Environmental Scientist III/Engineering, Team Lead

FROM: Priscilla W. Burton, Environmental Scientist III/Soils

RE: SUFCO Midterm Review, Canyon Fuel Company, LLC., SUFCO Mine,

C/041/002, Task ID #2068

SUMMARY:

The midterm review was initiated on November 18, 2004. A review of the soils chapter 2 and the refuse information (volume 3) revealed the following information should be updated in the MRP.

An As Built of the Link Canyon topsoil stockpile (Section 2.3.1.1) should be produced illustrating the stockpile configuration and providing "as built" salvaged volumes. Recent work on the topsoil stockpile at the main mine site should be described in the MRP.

The MRP indicates the waste rock site will be contemporaneously reclaimed and that the initial cell will cover 4.5 acres (Section 3.4, Vol. 3). Section 3.3 and Map 4 of Volume 3 should be revised to illustrate the current status of the refuse site for reclaimed, active, and topsoil salvage areas.

TECHNICAL ANALYSIS:

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

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Analysis:

Topsoil Removal and Storage

An As Built of the Link Canyon topsoil stockpile (Section 2.3.1.1) should be produced illustrating the stockpile configuration and providing "as built" salvaged volumes. In addition, the plan should be revised where necessary if Oregon grape cuttings were not salvaged for planting on the stockpile as described on page 2-19 and 2-13. Protection by Oregon grape described on page 2-24 should be verified.

Recent work conducted on the topsoil stockpiles (Inspection Report June 6, 2003) should be described in the MRP, including roughening techniques, mulch and seed list, and dates of work.

Findings:

The information provided in Section 2.3.1.1 of the MRP should be updated in accordance with:

645-301-121.100, ◆An As-Built of the Link Canyon topsoil stockpile (Section 2.3.1.1) should be produced illustrating the stockpile configuration and providing "as built" salvaged volumes. ◆ In addition the plan should be revised where necessary if Oregon grape cuttings were not salvaged for planting on the stockpile as described on page 2-19 and 2-13. Protection by Oregon grape described on page 2-24 should be verified. ◆Recent work conducted on the topsoil stockpiles (Inspection Report June 6, 2003) should be described in the MRP, including roughening techniques, mulch and seed list, and dates of work.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

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Refuse Piles

Certification of the refuse piles is provided to the Division quarterly (not in the Annual Reports), but volume of refuse hauled to the site is not disclosed with the quarterly inspections. The 2003 Annual Report contains a vegetation analysis of three cells of the waste rock site. The MRP indicates the waste rock site will be contemporaneously reclaimed and that the initial cell will cover 4.5 acres (Section 3.4, Vol. 3). Section 3.3 and Map 4 of Volume 3 should be revised to illustrate the current status of reclaimed, active, and topsoil salvage areas at the refuse site.

Findings:

The information provided in Section 2.3.1.1 of the MRP should be updated in accordance with:

645-301-121.100, Section 3.3 and Map 4 of Volume 3 should be revised to illustrate the current status of reclaimed, active and topsoil salvage areas at the refuse site and the current volume of waste stored at the refuse site to date must be indicated.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Acid- and Toxic-Forming Materials and Underground Development Waste

Sampling of the waste quarterly during periods of waste hauling is described on page 3-4 of Vol. 3. The last sampling of waste reported in the Annual Reports occurred in 1995. The Permittee has been sampling the waste since that time, but it has not been included with the annual report. The Division should request that the information is provided in the annual reports so that it can be quickly accessed.

A review of the 2004 and 2005 quarterly sampling received to date indicates that the waste rock is high in sodium and boron.

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Findings:

The information provided in Section 2.3.1.1 of the MRP should be updated in accordance with:

645-301-121.100, Current volume of waste stored at the refuse site should be included in the MRP and the Division should request that the quarterly waste rock information be included with the annual report so that it can be quickly accessed.

RECOMMENDATIONS:

The requested information should be provided to the Division during the midterm review.

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